



Chromosome	#SNP	Chr. size (bp)*	SNP density (bp/SNP)	Critical decay distance (bp)
1	4,346	43,270,923	9,956	665,000
2	3,044	35,937,250	11,806	675,000
3	2,429	36,413,819	14,991	955,000
4	3,145	35,502,694	11,289	1,285,000
5	2,271	29,958,434	13,192	1,205,000
6	2,778	31,248,787	11,249	525,000
7	2,935	29,697,621	10,118	1,145,000
8	3,259	28,443,022	8,728	1,125,000
9	1,787	23,012,720	12,878	815,000
10	3,904	23,207,287	5,944	1,355,000
11	4,641	29,021,106	6,253	445,000
12	2,884	27,531,856	9,546	1,015,000
Total	37,423	373,245,519	Average 10,496	934,167

\* according to Kawahara et al., 2013

**Additional file 4: Figure S2.** Analysis of the genome-wide LD decay in the rice panel used for GWAS. The curve represents LD averaged values in 10 kb windows (see Materials and Methods for details). The red line represents the threshold  $R_2$  value to consider two markers as unlinked. The table reports, for each chromosome, the number of SNPs, the size, the marker density and distances corresponding to a  $R_2$  value of 0.2. The average genome-wide value is also shown.